ENVIRONMENTAL QUALITY COUNCIL
JOINT MEETING OF THE
LAND USE/ENVIRONMENTAL TRENDS SUBCOMMITTEE and the
WATER POLICY SUBCOMMITTEE

May 5, 2000
Meeting Minutes

Draft: June 30, 2000
Approved: July 27, 2000

SUBCOMMITTEE MEMBERS PRESENT

Sen. Tester
Mr. Jerry Sorensen
Rep. Bill Tash
Sen. McCarthy
Ms. Julia Page

SUBCOMMITTEE MEMBERS EXCUSED

Sen. Barry "Spook" Stang

STAFF MEMBERS PRESENT

Mary Vandenbosch
Larry Mitchell
Judy Keintz, Secretary

Visitors' List (**Attachment 1**)
Agenda (**Attachment 3**)

I CALL TO ORDER AND ROLL CALL

SEN. TESTER called the meeting to order at 2:30 P.M. Roll call was noted (**Attachment 2**).

II WATER QUALITY TRENDS

- **U.S. Geological Survey**

Bob Davis, District Chief of the Montana District of the US Geological Survey, reported that the fixed-station monitoring network consists of 37 sites on a statewide basis. Fourteen of the sites are monitored as part of other USGS Programs. Sampling for nutrients and suspended sediments takes place four times a year. Major ions and trace settlements are also sampled.

They follow strict quality assurance and quality control procedures. All samples are analyzed at the National Water Quality Laboratory in Denver.

He provided a handout entitled, "The Fixed-Station Surface-Water-Quality Monitoring Network in Montana", **Exhibit 1**, and reviewed the same.

The needs for the network would include some new sites. More frequent sampling would be beneficial and also would increase the amount of information available. It would also increase the costs, which are shared with the Department of Environmental Quality (DEQ). They would support any expansion if DEQ, or other agencies, could afford it. The costs are approximately $50,000 per annum. This is shared on a 50/50 basis.

Expanding the list of constituents would also be helpful. Some of the things that are not included are organic chemicals, including pesticides. Pharmaceuticals are becoming an issue of concern. People are seeing affects near confined animal feeding operations (CAFOs). A lot of antibiotics are used in those operations.

The network could benefit from participation by other agencies who have water quality concerns. Approximately 20 agencies and interest groups help fund the stream flow stations across the state.

SEN. MCCARTHY questioned how the sites were chosen. **Mr. Davis** agreed to provide that information to the Subcommittees.

MR. MITCHELL asked the purpose of this particular network. **Mr. Davis** explained that the purpose is to help describe the existing water quality in the major rivers in Montana and also to determine the changes that occur in those systems over time and whether or not a trend is being established.

- **Montana Department of Environmental Quality**

Art Compton, DEQ, stated that the 37 sites involve the only consistent monitoring on streams other than for specific projects. The network is funded for the next year by additional Section 106 funds from the Environmental Protection Agency (EPA). It takes about ten years of data to arrive at concrete trend information. The 303(d) list is a state inventory of streams that are not fully supporting their beneficial uses. The Gingery (TMDL) Program has held the first of sixteen meetings on the new impaired waters list. Approximately 886 water bodies have been assessed and approximately one-half have enough sufficient and credible data to reach a reasoned professional judgment on whether or not the stream reach is supporting its beneficial use. Approximately 381 of the water bodies are impaired or threatened for one or more of their beneficial uses such as water supply, fisheries, irrigation, etc.

The TMDL Program is a planning tool to identify the highest priority streams for which restoration activities can be implemented so that they are eventually fully supporting all their uses. The 37 initial sites are the best hope for a scientifically based assessment of water quality trends on a statewide basis. An essential element in demonstrating compliance with federally delegated state water quality law includes determining the baseline conditions.

REP. TASH questioned whether the TMDLs would be ranked. **Mr. Compton** remarked that this would be applicable to their prioritization of where the TMDL and 3 19 Non-Point Source Program funds would be spent. There has been a lot of interest in the TMDL Program as a result of the EPA federal rule making effort. No one regulates non-point source pollution.

MR. SORENSEN questioned whether the TMDL projects would include a monitoring component. **Mr. Compton** affirmed that they would. The TMDLs under active implementation must all include a monitoring component to assess the effectiveness of the projects in regard to reducing sediment, erosion, and habitat alteration. Of the 900 stream assessments completed, there is sufficient and credible data for only one-half of the streams. The remaining streams will be removed from the list at least temporarily. It is statutorily required that they ramp up their monitoring efforts on those remaining streams so that valid judgments are made as to whether or not they are returned to the 303(d) list.

SEN. TESTER questioned whether private funds could be used for the monitoring network. **Mr. Davis** explained they could accept support from a conservation district. They could not take funds from a private individual. The private individual could give that support to the DEQ. **Mr. Compton** did not know how they would accomplish performing work sponsored by an entity outside of the government. He agreed to review the issue and respond to the Subcommittee.

MS. VANDENBOSCH remarked that **Duane Anderson** of the **Natural Resources Information System** was not able to attend today's meeting. He did provide information for the Subcommittee, **Exhibit 2**. **Sue Crispin, Natural Heritage Program,** was in attendance. The **Montana Watershed Coordination Council** has a water quality monitoring work group and they may be able to attend a future meeting.

- **Department of Agriculture**

Gary Gingery, Department of Agriculture, stated that the two laws which they administer include the Pesticides Act and Agriculture Chemical Groundwater Act. Their activities deal with both surface and groundwater. The problem with monitoring in surface water is the newer generation of pesticides disappear rapidly. There are a lot of monitoring activities for groundwater. They do not have a program for measuring long-term trends. They have nine permanent monitoring sites around the state and scan for a host of different pesticides. Anytime they find a positive sample, they return for additional samples. They also have noted that when a pesticide is found, in a few weeks or a months it is no longer there. Different water tables result in a quality/quantity issue.

Pesticides have been detected in groundwater in the Fairfield Bench area. They are working closely with various state and federal agencies and the producers in the area. If they find that improper use has been involved, they can establish best management practices to prevent the same. The EPA will be restricting four pesticides in Yellowstone County. They will be setting up a management program to include monitoring.

Since 1984, they have sampled 364 sites for pesticides and collected 2,307 samples and have conducted over 34,000 analyses for pesticides. In certain locations they are developing trend data. Most of their findings are non-point. It is important to develop trends and conditions but this will take additional funding.

MR. SORENSEN asked if the information being gathered was being considered in the TMDL process. **Mr. Gingery** stated that it was not.

- **Montana Bureau of Mines and Geology**

Tom Patton, Montana Bureau of Mines and Geology, provided a handout entitled, "Montana Bureau of Mines and Geology, Ground-Water Assessment Program: Progress Report", **Exhibit 3,** and reviewed the same. He further reviewed another document entitled, "Montana Ground- Water Assessment, Water-Quality Data Collection", **Exhibit 4**. Additional handout, "Groundwater Characterization and Monitoring", **Exhibit 5**.

- **Natural Resources Information System**

Sue Crispin, NRIS, remarked that one of the difficulties with the data collection process is that when an updated data layer is received, the old data is discarded. There is real value to keeping the historical data. The NRIS may be able to serve an archive function in addition to providing the data in an integrated manner.

II ENVIRONMENTAL TRENDS AND CONDITIONS - STATE AGENCY PERSPECTIVES AND DIALOGUE

- **Montana Department of Fish, Wildlife and Parks (FWP)**

Chris Smith, FWP, reported that in most cases data is collected to answer specific management questions. He questioned the trends that the EQC was interested in monitoring. He noted that they monitor different items in relation to fish population that may be useful in monitoring water quality in the state.

- **Montana Department of Environmental Quality**

Mark Simonich, DEQ, stated that they have been monitoring ambient air quality around the state for a variety of reasons. They are monitoring the status of criteria pollutants, those designated by the EPA, at 33 representative locations around the state. Also they have been monitoring for a particulate matter for a number of years. They have moved to monitoring a smaller size due to EPA efforts to establish a new particulate standard. They currently have 12

locations around the state selected for the highest likelihood that there would be high exceedances. Particulate pollution in Montana typically involves dust and wood smoke.

In the Billings area, they have monitored sulfur dioxide for a number of years. Total emissions of sulfur dioxide have been reduced from 30 tons per year to 13 tons per year. This was accomplished by working with seven industrial sources in the area.

More funding is necessary so resources can be focused to collect information for making decisions on how industrial activity takes place in the state and what is necessary to provide for the environment. An EPA grant is being used in the Billings area to allow real time data to be placed on the Internet. This is a one-time grant to Yellowstone County.

The Western Governors' Association is involved in a process called the Western Regional Air Partnership. Several states are reviewing regional haze issues. We have very little input regarding the air that comes into our state. The goal is to monitor air quality throughout the west and pinpoint sources of emissions to see if collective solutions could be effective in minimizing the air quality impact.

The best tracking system the DEQ has to deal with water quality is the 303(d) report. This will require additional monitoring as TMDLs are developed and implemented. There is a monitoring program in the Clark Fork Basin that monitors for nutrients, algae, and metals. There are 32 sites set up throughout the Clark Fork Basin. The Flathead Basin has a similar program for monitoring around the Flathead Lake.

Chris Tootell, DNRC, stated that the forestry Best Management Practices (BMP) Program has been around since the mid-1980s. Biannual BMP audits are prepared. The trends are good and the compliance with BMPs is excellent. Teams of experts review approximately 50 harvesting sites that are near water and evaluate the effectiveness of BMPs. This is not a statistically defensible sample but 12 years of data has been compiled and the trends speak for the application and effectiveness of the program. The BMP audits are able to determine what is or is not working. The shortfalls are addressed through educational programs.

Audits are showing that if proper BMPs are applied, unwanted sedimentation to streams can be avoided. The Stream Side Management Zone Program is a purely regulatory program. The trend would be the number of violations issued by the department. Warnings are issued that acknowledge a violation of some aspect of the SMZ law. An order involves damage that can be repaired, but this may include long-term damage. This usually includes a fine. In 1993, they began issuing citations. In 1994, there were 60 enforcement activities. In 1999, there were 30 enforcement activities. In 1996, there were 10 orders and in 1999 no orders were issued. In 2000, there has been one order issued.

- **Department of Agriculture**

Gary Gingery, Department of Agriculture, stated that it was necessary for the EQC to decide what parameters it would like to use to measure environmental trends. This project may involve some additional funding and some reallocation of resources. There are fundamental costs of monitoring. It is also important to set the time span on the data collected. The university system may have a role in this project. In the science area, parameters have been set up to review trends and following five to ten years of monitoring the information was not relevant.

He provided the 1997 Census of Agriculture Report. This report is compiled every five years and includes information such as the amount of land in the Conservation Reserve Program (CRP) at the present time. Climate data and soil erosion information can be obtained through the Natural Resources Conservation Service (NRCS). The Department could review pesticide and fertilizer usage and problems. Many people are also interested in invasive species, especially in regard to weeds. There are serious insect problems as well.

III DISCUSSION OF NEXT STEPS

MR. SORENSEN remarked that one of the statutory requirements of the EQC is to report on the environmental trends in the state. The last report did not include information that could be readily replicated.

REP. TASH noted the importance of measuring trends to determine our natural resource utilization and management. There is an opportunity to educate people to the advantage of recreating and irrigating with the same water and doing so in a compatible manner. The BMPs and the SMZs are measurable and their effectiveness could be demonstrated.

Mr. Tootell stated that one of the reasons the BMP Program has been successful is because there is a target population. The trend information has been used to educate. The audits showed shortfalls of the BMPs themselves, so the BMPs were upgraded. Educating the general public is possible by media coverage.

Mr. Simonich commented that each agency follows its own path due to statutes they administer. The EQC could establish the primary areas of importance for tracking trends. The Departments could then better focus their efforts.

SEN. TESTER remarked that it would be good to combine the efforts and reduce duplication, thereby providing better information on the baseline data.

MR. SORENSEN noted that water quality may be the best starting point. The USGS is providing some good information. The cost seems in line with 37 sites funded at approximately $50,000 per year.

Mr. Tootell remarked that there is a huge invasive species problem in the state. This is not being addressed in terms of the forestry department. He urged the EQC to review the activities addressing invasive species to see if they are effective.

Mr. Simonich stated that each of the four departments is addressing concerns for the same issues. If information is being collected anyway, it could be collected in a way that would be more useful.

SEN. TESTER questioned what type of testing would best provide information as to whether water policy is improving or declining in the state.

Mr. Simonich stated that it is important to maintain the beneficial use of the water. The FWP will review water from a habitat standpoint.

Mr. Gingery noted that in regard to water quality, it was important to perform both chemical and biological testing to understand what is happening.

Mr. Smith stated that they are trying to develop performance measures to be used at the agency level, the program level, etc. The information monitored could be more efficiently focused. The three broad areas could include water quality, air quality, and ecological integrity.

Mr. Simonich suggested that the four departments meet to discuss which efforts are most important to track.

MR. SORENSEN added that the EQC is responsible to report to the Legislature regarding the condition of the environment. This would include trend information over time. A trend analysis report could be developed every five years.

SEN. TESTER requested that the departments provide specific performance measures. Funding could then be addressed. The areas to be addressed would include water, air, and invasive species.

IV ADJOURNMENT

There being no further business, the meeting was adjourned.